## FRANKLIN COUNTY WIND ENERGY REGULATIONS

## Sec. 25-128. Towers, antennas, satellite dishes.

- (a) Communication facilities subject to the following conditions:
- (1) Each applicant for a tower shall provide the department of planning and community development with an inventory of its existing facilities that are either within the jurisdiction of the governing authority or within five miles of the border thereof, including specific information about the location, height, and design of each tower. The planning department may share such information with other applicants applying for approvals or special use permits under this section or other organizations seeking to locate antennas within the jurisdiction of the governing authority, provided, however, that the planning department is not, by sharing such information, in any way representing or warranting that such sites are available or suitable for use by others.
- (2) Verifiable evidence of the lack of antenna space on existing towers, buildings, or other structures, including but not limited to churches, power lines, water towers, etc., suitable for antenna location or evidence of the unsuitability of existing tower locations for co-location must be provided by the applicant. Such evidence shall also include an affidavit executed by a radio frequency engineer that such existing tower or structure is unsuitable for the applicant's needs. Such evidence may also include any of the following items:
- a. No existing towers or structures are located within the geographic area required to meet applicant's engineering requirements.
- b. Existing towers or structures are not of sufficient height to meet applicant's engineering requirements.
- c. Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment.
- d. The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna.
- e. The fees, costs or contractual provisions required by the owner in order to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable.
- f. The applicant demonstrates that there are other limiting factors that render existing towers and structures unsuitable.
- (3) An engineering report certifying that the proposed tower is compatible for a minimum of four (4) users, must be submitted by the applicant. The applicant shall also permit collocation by additional users without requiring any form of reciprocal location agreement from subsequent users. The provision may be modified by the board of supervisors in conjunction with subsection (14) below, when a lower height is approved by the board of supervisors and collocation of four (4) users is not possible.
- (4) A preliminary site plan of the proposed facility shall be submitted to the department of planning and community development as a part of the submittal. The applicant must provide the county with detailed information regarding the proposed facility's location, latitude and longitude, and service area.
- (5) The facility shall not interfere with the radio, television or communications reception of nearby residents at the time of construction. The applicant shall take steps to successfully eliminate any such interference.
- (6) All towers and other structures shall meet all safety requirements of all applicable building codes.
- (7) All towers shall set back from any property line a distance equal to one hundred twenty (120) percent of the tower height, and in no event shall any such tower be constructed or erected

nearer than one hundred twenty (120) percent of the tower height to a residential dwelling unit on the subject parcel, and five hundred (500) feet to a residential dwelling unit located on an adjacent parcel except for the following:

- a. Setbacks from residential dwelling units shall not apply to the property owners' construction of a residential dwelling subsequent to erection of the tower.
- b. No setback shall be required adjacent to VDOT right-of-way for an interstate highway. Setback requirements from residential dwelling units, however, shall supersede this provision. This provision may be modified by the board of supervisors during the special exception process.
- (8) Documentary evidence of compliance with all Federal Aviation Administration and Federal Communication Commission requirements shall be submitted by the applicant at the time of application for the special exception.
- (9) Unless otherwise allowed under the conditions of a special use permit, or as a requirement of the Federal Aviation Administration, all towers shall have a galvanized steel finish. If painting is required by the FAA, documentary evidence from the FAA requiring such painting must be provided to the County by the applicant.
- Should the applicant request to construct the tower from materials other than galvanized steel, the applicant shall state the reasons for the request in the application, and the applicant shall also furnish the county with photographs, videos, or some other visual sample of the proposed finish.
- (10) All applicants must provide documentary evidence that the facility will meet or exceed applicable health standards established by the federal government and/or American National Standards Institute.
- (11) No advertising of any type may be placed on the tower or accompanying facility.
- (12) All towers and accompanying facilities must be dismantled by the owner of the tower or accompanying facility if not utilized by a service provider or properly maintained for a period exceeding twenty-four (24) consecutive months. The applicant shall post surety bond in an amount sufficient to cover the costs of dismantling. Surety shall be submitted to and approved by the county prior to site plan approval.
- (13) Owners of towers shall provide the county, or it agents or designees, co-location opportunities on each or any tower without compensation as a community benefit to improve radio communication for county departments and emergency services provided it does not conflict with the collocation requirements of subsection (3).
- (14) Maximum tower height shall be one hundred ninety-nine (199) feet.
- (15) A one hundred-foot wooded buffer easement shall be retained around the site, except for ingress/egress unless otherwise approved by the board of supervisors. An easement for the wooded buffer shall be recorded in the land records of the circuit court prior to site plan approval. Such easement shall retain the wooded buffer for the life of the tower or accompanying facilities. A section of fence at least six (6) feet in height shall be provided completely around the base of the tower and any associated equipment.
- (16) The owner of the tower shall annually provide the planning department and the commissioner of revenue a report with the names, addresses, contacts, structures and equipment for all providers utilizing the tower.
- (17) The tower shall be constructed and at least one user located on the tower within twelve (12) months of the date of issuance of the special exception or approval shall be null and void. The applicant shall post surety bond in an amount sufficient to cover the costs of dismantling. Surety bond shall be submitted to and approved by the County prior to site plan approval.

- (18) The applicant shall be responsible for any costs incurred by the county for review of the application.
- (19) Accurate, to scale, photographic simulations showing the relationship of the proposed broadcasting tower and associated antenna to the surroundings. Photographic simulations shall also be prepared showing the relationship of any new or modified road, access or utility corridors constructed or modified to serve the proposed broadcasting tower site. The number of simulations and the perspectives, from which they are prepared, shall be established with the staff.
- (20) A computerized terrain analysis showing the visibility of the proposed broadcasting tower and antenna at the requested height and location. If new or modified road, access or utility corridors are proposed, the terrain analysis shall also show the visibility of these new or modified features.
- (21) All broadcasting tower applicants shall be required, at their expense to conduct an on-site "balloon" or comparable test prior to the planning commission and board of supervisors hearings on the special use permit. The purpose of this test shall be to demonstrate the potential visual impact of the proposed tower. The dates and periods of these tests shall be established with the applicant in consultation with staff.
- (b) Amateur radio towers shall be subject to the following requirements:
- (1) Amateur radio towers shall be permitted in all zoning districts.
- (2) Amateur radio towers, including any and all antennas, appurtenances, cables, guy wires, or structural supports, shall be subject to the front, side and rear setback requirements for accessory structures for the zoning district in which the tower is located.
- (3) No amateur radio tower may exceed a height of two hundred (200) feet, as measured from the ground at a point directly beneath the apex of the tower.
- (4) Prior to the issuance of a land use permit for any amateur radio tower, the applicant shall provide the following:
- a. A completed land use application form.
- b. A copy of the approved and valid Federal Communications Commission license.
- c. A description of the proposed tower, including its height and method of construction.
- d. A survey plat of the subject property, showing meets and bounds of all property lines, the location of all existing structures, and the proposed location of the tower, including the location of cables, guy wires or other structural supports.
- (c) Wind energy facilities shall be subject to the following requirements:
- 1. Wind energy facilities shall be permitted as follows:
- a. Small systems shall be a permitted use in the A-1 district; small systems shall require a special use permit in the B-2, M-1 and M-2 districts;
- b. Large systems shall require a special use permit in the A-1, B-2, M-1 and M-2 districts;
- c. Utility scale systems shall require a special use permit in the A-1, B-2, M-1 and M-2 districts.
- 2. An application for a special use permit for a wind energy facility shall contain the following:
- a. A narrative describing the proposed wind energy facility, including an overview of the project;
- b. The approximate generating capacity of the wind energy facility;
- c. The specific number, representative types and height or range of heights of wind turbines to be constructed, including their generating capacity, dimensions and respective manufacturers and a description of ancillary facilities;

- d. Identification and location of the properties on which the proposed wind energy facility will be located;
- e. A site plan sealed by a professional engineer, showing the planned location of each wind turbine, property lines, setback lines, access road and turnout locations, substation(s), electrical cabling from the wind energy facility to the substation(s), ancillary equipment, buildings, and structures, including permanent meteorological towers, associated transmission lines, and location of all structures and properties within the geographical boundaries of any applicable setback;
- f. Signed and approved copies of any negotiated power purchase agreement and the utility company's approved schematics;
- g. Decommissioning plans that describe the anticipated life of the wind power project, the estimated decommissioning costs in current dollars and the anticipated manner in which the wind power project will be decommissioned and the site restored;
- h. Signature of the property owner(s) and the facility owner/operator of the wind energy facility;
- i. Utility scales wind energy facilities shall require an Environmental Impact Study (EIS). The EIS shall require review and comments from applicable state and federal agencies, including, but not limited to, Virginia Department of Environmental Quality, Virginia Department of Mines, Minerals, and Energy, US Army Corps of Engineers, National Park Service and the US Fish and Wildlife Service; and,
- j. Identification of adjacent land uses and zoning districts;
- k. Topographic data of subject property based on a minimum of ten-foot contours;
- 1. Identification of existing tree lines on subject property;
- m. Design of the wind energy facility, including materials, colors and finishes;
- n. Estimated maximum decibel level of operating wind energy facility; and
- o. Other relevant studies, reports, certifications and approvals as may be deemed necessary by Franklin County to ensure compliance with this chapter.
- 3. The following dimensional requirements shall apply to the installation of wind turbines and/or wind energy facilities:
- a. Small systems shall require a five-acre minimum lot size; large systems shall require a tenacre minimum lot size; utility scale systems shall require a fifty-acre minimum lot size.
- b. Small systems shall not exceed a maximum height of one hundred (100) feet from grade; large systems shall not exceed a maximum height of two hundred (200) feet from grade; utility scale systems shall not exceed a maximum height of five hundred (500) feet from grade.
- c. Height shall be measured as the vertical distance from the highest point of the structure, including turbine blades when rotated to their highest elevation, to a point on the ground directly beneath the apex of the structure, including turbine blades.
- d. Wind energy facility shall be set back from property lines, public rights-of-way and private streets in accordance with the ratio of setback to height specified in the following table: TABLE INSET:

Wind	Required setback from	Required setback from	Required setback from
Energy	property line, expressed	public right-of-way,	private street, expressed
Facility	as a ratio of setback to	expressed as a ratio of	as a ratio of setback to
Type	height	setback to height	height

Small System	1.5	2.0	2.0
Large System	1.0	1.5	1.5
Utility Scale	1.0	1.5	1.5

- e. Setbacks shall be measured from a point directly beneath the apex of the structure, including turbine blades.
- f. As part of the special use permit process, the property owner(s) may request a deviation of the setback requirements of the subject property. The deviation shall describe how the proposed wind turbine and/or wind energy facility is not in compliance and state that consent is granted for the wind turbine and/or wind energy facility to not be setback as required by this chapter. Any such deviation shall be signed by adjacent property owner(s) as a condition of the special use permit.
- 4. Wind energy facilities shall be subject to design and construction requirements as follows:
- a. The installation and design of the wind energy facility shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI).
- b. All electrical and mechanical components of the wind energy facility shall conform to relevant and applicable local, state and national codes.
- c. The visual appearance of wind energy facilities shall at a minimum:
- 1. Maintain a galvanized finish and be nonobtrusive color such as white, off-white or gray;
- 2. Not display advertising (including flags, streamers or decorative items), except for identification of the turbine manufacture, facility owner and operator.
- 5. Decommissioning or abandoned wind energy facility shall be subject to the following requirements:
- a. The wind energy facility owner, operator and/or property owner shall have three (3) months to complete decommissioning of the facility if no electricity is generated for a continuous period of twenty-four (24) months.
- b. Decommissioning shall include removal of wind turbines, buildings, cabling, electrical components, roads and any other associated facilities.
- c. Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored.
- d. A performance surety, in a form approved by the county administrator or his designee, shall be submitted by the applicant prior to the issuance of land use and building permits in order to insure removal of the wind energy facility when it is no longer to be used for wind generation. (Ord. of 4-19-05; Res. No. 15-10-2008, 10-21-08; Res. No. 5-05-2009, 5-19-09)